

User manual and medical device booklet

mezzo



Konformitätserklärung

Declaration of conformity

Wir erklären in alleiniger Verantwortung, dass das Produkt
We declare under our sole responsibility that the product

mezzo V2.0

auf das sich diese Erklärung bezieht, mit der /den folgenden Normen oder
normatischen Dokumenten übereinstimmt.
to which this declaration relates is in conformity with the following directives.

Es entspricht damit den Bestimmungen der folgenden Richtlinie:
It corresponds to the rules of the following directives:

Richtlinie 93/42/EWG
des Rates vom 14. Juni 1993 über Medizinprodukte
Klasse I nach Anhang VII

Council directive 93/42/EEC
of 14th June 1993 concerning medical devices
Class I / Annexe VII

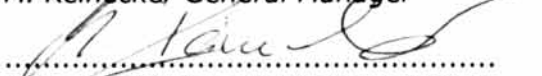
Die CE- Kennzeichnung auf dem Gerät dokumentiert diese Übereinstimmung.
The CE mark on the system points out this accordance.

Alsbach-Hähnlein,

01.08.2010

.....
Ort und Datum der Ausstellung
Place and date of issue

M. Reinecker Geschäftsführer
M. Reinecker General Manager


.....
Name und Unterschrift des Befugten
Name and signature of the authorized person

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General notice:

Important note for the use of the electronic magnifier mezzo.
Read these notes carefully before initial operation.

1. Notes on the electromagnetic compatibility (EMV)

The electronic magnifier mezzo is suitable for use in all set-ups including buildings that are connected directly to a public mains electricity supply.

The customer or user should ensure the use in the indicated environment.

Electronic devices are sensitive to electric discharge and to high-frequency electromagnetic fields.

The electronic magnifier uses only high frequency energy for its own function. When operating the system simultaneously with other systems, however, the possibility of disturbances of the system or other systems should not be neglected, although the possibility of interference with other systems close by is rather unlikely.

1.1 Combined use with other devices.

Warning notice: it should be ensured that the electronic magnifier device is not placed directly beside or on top of another system.

If the set-up of the electronic magnifier in the proximity of medical, analogical measuring devices cannot be avoided, the operator of these devices has to be informed that it is necessary to observe the performance of the system to guarantee an intended use of the system.

A minimum distance of one meter is recommended in relation to mobile high frequency-communication devices.

1.2 Product description

mezzo is a compact electronic magnifier for the opto-electronic enlargement of texts, photographs and plastic articles. The system corresponds to the product group 25 of the aid listing and fulfils the qualitative and functional requirements described therein.

1.3 Purpose

mezzo is a medical product of class I, which is intended to be used by visually impaired people.

1.4 Product life

Seven years from the date of production, provided that the recommended maintenance measures are carried out.

1.5 Security advice

The electronic magnifier is designed for installation in closed and dry rooms exclusively. In medical environments the mezzo must not be operated on the same electrical circuit as devices for purposes of maintaining life.

The mezzo should not be operated in explosion-endangered environments. This electronic magnifier device should only be installed in conjunction with modern electrical circuitry. It is a device of a protection class II.

1.6 Equipment cleaning

The mezzo has to be switched off and separated from the current power supply before cleaning. No liquids may penetrate into the equipment whilst cleaning.

1.7 Special advice for transport and storage

The following conditions for storage and transport in a temperature range from -10°C to + 50°C have to be respected. The relative humidity should be 30% to 80%, when air pressure lies by 700-1000 hPa.

1.8 Dealing with faults

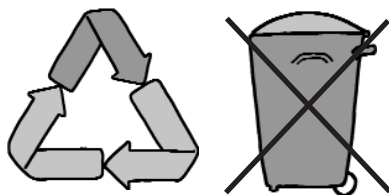
If technical problems do occur, the unit must be switched off immediately and the mains plug disconnected. In this condition, the unit shall not be used! Refer directly to your local dealer or to Reinecker headquarters.

1.9 If problems arise

If your mezzo does not appear to be working first, check if the unit is connected to the electricity supply. If the unit appears to be working, but you believe there is a fault, switch off the unit and disconnect it from the wall socket. Call your local dealer for advice.

1.10 Environmentally friendly disposal according to EC directive 2002/96/EG

The appliance contains electronic components. In order to avoid risks or dangers for the environment through non-professional disposal, the disposal of the product, including all accessories, has to correspond to the valid directives.



1.11 Use in conjunction with medical products

If the operator or user intends to run this electronic magnifier mezzo together with other medical devices such as cardiac pacemakers, the written permission of Reinecker Reha-Technik GmbH is required first.

1.12 Storage/Safe-keeping of the operating instruction

The manual and the device booklet, which proves that you are the legitimate owner of the product, is part of the package of the mezzo. They have to be looked after. If lost you can order a new manual and device booklet with an additional cost at Reinecker Reha-Technik GmbH.

2 mezzo set up

delivery contents

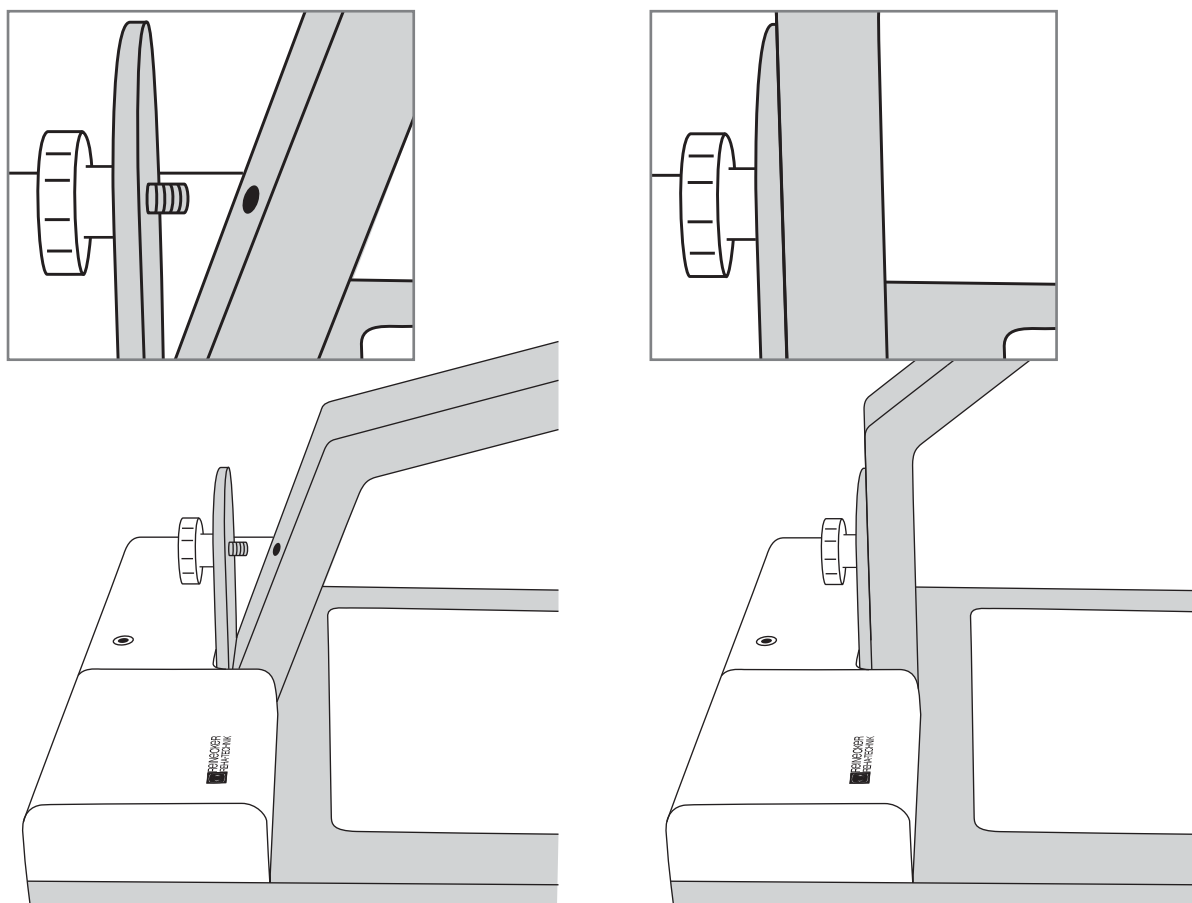
- portable electronic magnifier mezzo
- plug- in power supply
- manual

mobility package (optional)

- carrier bag incl. strap
- rechargeable battery

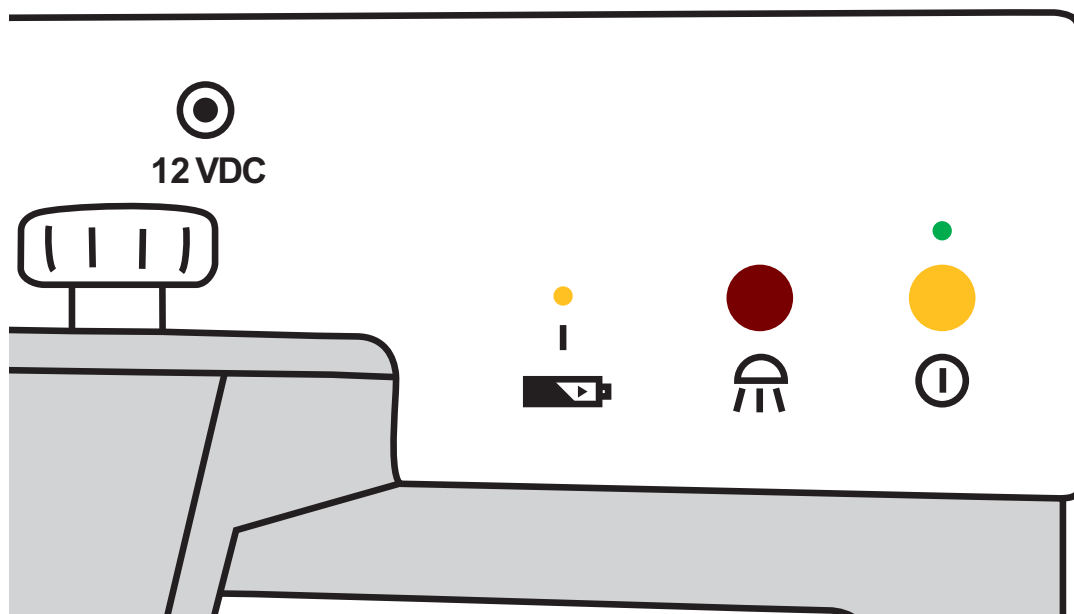
Unit set up

The device has to be taken out of the package and placed on a stable surface. Then attach and screw the mounting arm onto the joint angle. Now you can connect the enclosed plug-in power supply lead to the mezzo and the electricity mains socket.



3 mezzo operating elements

3.1 Control panel baseplate



12 VDC



power supply socket



lighting on/off



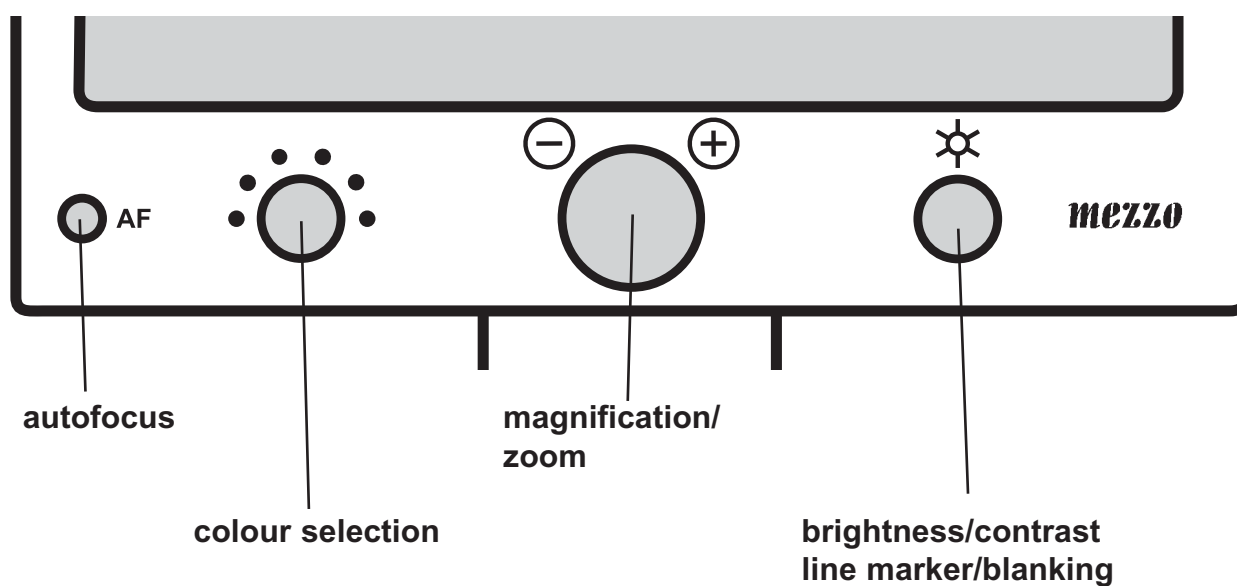
indicator for
rechargeable battery
when battery is installed



device on/off



3.2 Control panel TFT-Front



4 Description of the control elements

4.1 Control panel baseplate

On/off (power switch)



By pressing the power switch on the right side of the baseplate the electronic magnifier is switched on.



Attention!: if the baseplate is not illuminated after switching on the unit, check if the lighting of the unit is switched on (see lighting on/off) or if there is electricity at the mains socket and that the plug is properly pushed into the wall socket.

Lighting on/off

By pressing down the operating knob “lighting on/ off” on the control panel of the baseplate, the lighting can be:



- switched on
- dimmed
- switched off



4.2 Control panel TFT-Front

Autofocus (AF)

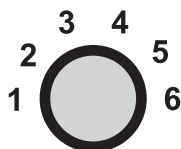
By pressing the AF-button the autofocus will be switched on/off and the camera sets automatically its optimal sharpness. The chosen state is briefly (approx. 3 seconds) displayed.



AF

Colour selection

With the operating knob “colour selection” on the TFT control front, following display colours can be chosen (from left to right):



Position 1: full colour display

Position 2: white font, black background

Position 3: black font, white background

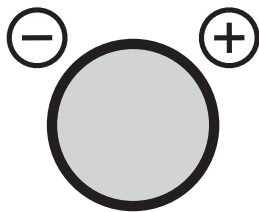
Position 4: green font, black background

Position 5: yellow font, black background

Position 6: yellow font, blue background

The chosen state is briefly shown at the lower section of the monitor.

Adjustment of enlargement



The magnification depends on the distance between the document and the camera. The magnification from the electronic magnifier ranges from 2.8-62 times.

This depends on the distance between reading material and camera.

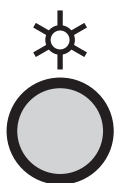
The magnification setting last used, will be activated, when the system is switched on again. While adjusting the magnification, the current level will be shown temporarily.

The camera adjusts automatically, within its scale of reproduction, to optimum focus. At the maximum magnification, the camera automatically provides a sharp picture up to a thickness of the document of 7 cm.

Automatic colour saturation

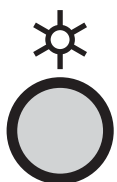
Brightness and colour saturation are automatically adjusted, colours are displayed true to original.

Contrast / Brightness



The automatic control knob has two functions. When it is pushed in it adjusts the contrast. When it is pulled out it adjusts the line marker and windowing. With the control pushed in turn the control anti-clockwise to reduce the contrast; turn it clockwise to increase the contrast.

Windowing and line marker



The control knob on the right side of the TFT control front has a push- in function. When pushing the button (forwards) the brightness and contrast regulator is activated.

Pull the control knob out and turn it anti-clockwise. Black bands will appear on the screen that can help you read, by masking unwanted parts of the picture or text, and is helpful with certain eye conditions.

This marker can help you track across a picture or text, which again is helpful with some eye conditions.

When you turn the knob clockwise the black bands disappear and are replaced by a marker line. Adjust the control to change the position of the marker line.

5 Start-up mezzo

The mezzo can be operated on a mains power supply or without connection using it's built in battery.

Main operation

Check if the power adapter is connected to the mains and the power supply socket (12 VDC) of the mezzo.

5.1 Activate

Press the on/off button to switch on the device. When the mezzo and the baseplate is illuminated, you can put a page or an object onto the table.

All the optional settings – for example zoom, colour or brightness- can be adjusted individually.

5.2 Closing-down and switching off the device

Switch off the device with the on/ off button.

5.3 Automatic save regulation for the device set-up

When you reset the device all settings used before will be activated again.

5.4 Replacement of the lighting

The electronic magnifier is equipped with a high power LED Illumination. If replacement of the lamp is required it should only be done by a specialist or by Reinecker Reha-Technik GmbH.

Attention: information about the power supply which is included in the scope of supply of the mezzo (Type: FW 7362M/12).

When using foreign manufactured products (for example a notebook power supply), there may be a risk of destroying the system.



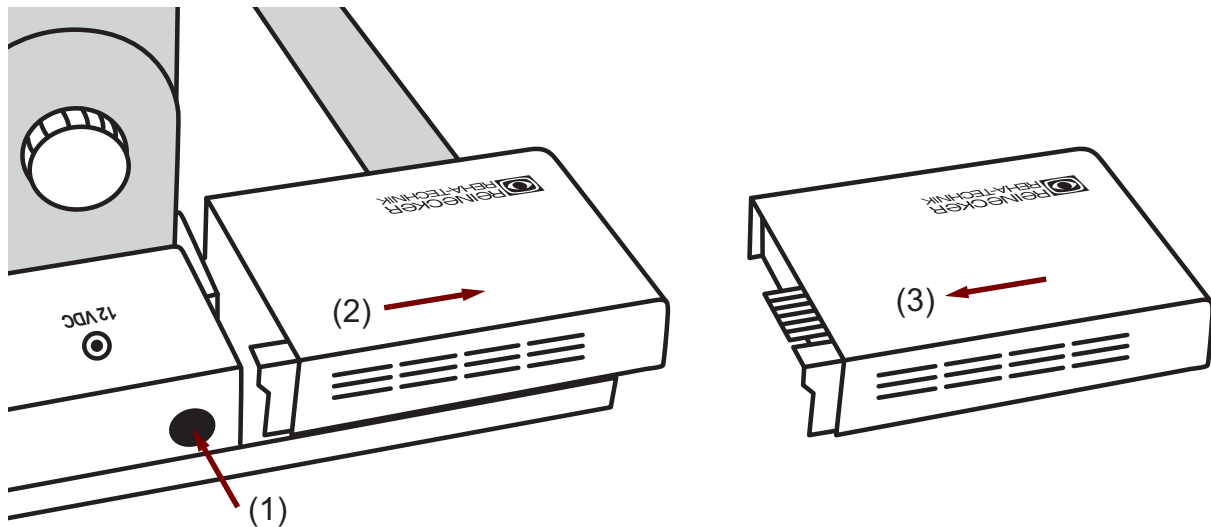
6 Mobility package/Use of battery

Additionally to the mezzo V2.0 a mobility package can be ordered as an option. This package contains a battery as well as a carrier bag incl. strap.

Insertion of battery

When the mobility package was ordered separately, it is necessary to independently insert the battery. For this, follow the procedure below:

- Press the black button on the back of the control panel on the base plate and keep it down (1), while you pull the small metal housing on the control panel of the base plate outwardly (2).
- Remove the empty metal housing and instead insert the housing with the battery (3).



Use of battery

- plug-in power supply is not connected
- keep pressing the on/ off button for approx. 1 second; device is ready to be used
- after switching on the system, the battery sign is shown on the display for approx. 6 seconds
- flashing of the battery sign: battery is empty and has to be re-charged. There is a remaining time of a few minutes before the electronic magnifier switches itself off

Battery charging

- when the battery sign flashes or the electronic magnifier has turned itself off
- connect plug-in-power supply
- battery is being charged; the yellow LED lights up
- when fully charged, the yellow LED disappears
- mezzo can be used and operated whilst it is being charged

Operating time when battery is fully charged

- When using full lighting approx. 2 hrs
- Without lighting the operating time is approx. 3,5 hrs
- The charging time of the battery is a total of 3,5 hrs when the mezzo is switched off

Check list: in case problems occur

Problem	Solution
Dark image No display of the image	Is mezzo switched on? Is the lighting switched on? If not: What is the charge status of the battery? Is the power supply connected? If so: Check the correct settings of the image (brightness, contrast)
Missing colour	Is the reading material you want to see displayed in colour? Control if you are in the colour mode!
Battery does not charge. The orange LED does not light up.	Check if the power supply is properly connected to the socket and the adapter is correctly contacted.

Product Identity

Type: electronic magnifier mezzo V2.0

Serial-Number: _____

Manufacturer: Reinecker Reha-Technik GmbH

Supplier: _____

Year of purchase: _____

* Operator: 1. _____ 6. _____
 2. _____ 7. _____
 3. _____ 8. _____
 4. _____ 9. _____
 5. _____ 10. _____

Final examination: _____

Date of despatch: _____

Power supply: 100 VAC–240 VAC 50-60 Hz

over plug- in power supply: 12V 2,5A Typ: FW7362M/12

Power consumption: approx. 30 Watt

Installed by: _____

****First safety check: _____

* Classification: Attention: When changing of operator, the new operator shall be named in the corresponding column.

** If re-using the unit, a new safety check is required!

Warranty Information

(Valid only within the European Union)

- 1) Reinecker Reha-Technik GmbH grants a warranty of 24 months against defects in manufacture counted from date of invoice ex Reinecker Reha-Technik GmbH.
- 2) All parts that have been replaced when repairing the unit will automatically become property of Reinecker Reha-Technik GmbH.
- 3) Damage caused by improper use or by non-compliance with the operating instructions will result in the invalidation of the warranty.
- 4) Interventions from persons other than Reinecker Reha-Technik GmbH authorised specialists may lead to invalidity of warranty.
- 5) Not included in this warranty are lamps, batteries, mirrors, glasses, bulbs and other parts subject to wear and tear.
- 6) If a warranty claim is necessary, the system has to be returned to the manufacturer in Alsbach-Hähnlein or to your authorised dealer. The manufacturer does not carry the cost for transport, packaging and insurance.

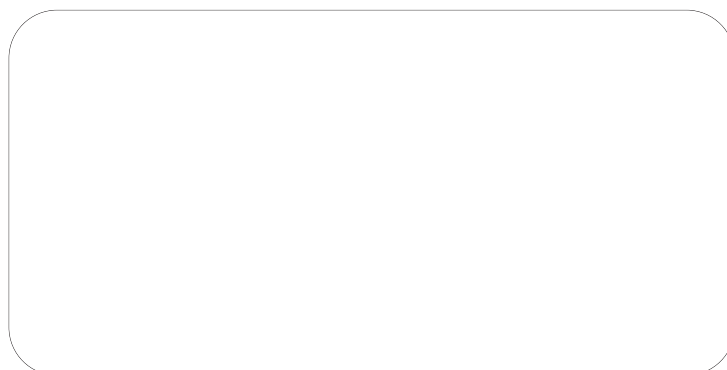
phone-number: +49 62 57-93 11-0

[View our General Terms and Conditions.](#)

Warranty Information

The legal requirements apply.

Your authorized distributor:



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**In case service is necessary,
please contact your authorized distributor.**

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